



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,203	06/20/2003	Grant M. Kloster	42P17058	8820

8791 7590 01/23/2007
BLAKELY SOKOLOFF TAYLOR & ZAFMAN
12400 WILSHIRE BOULEVARD
SEVENTH FLOOR
LOS ANGELES, CA 90025-1030

EXAMINER

NGUYEN, KHIEM D

ART UNIT	PAPER NUMBER
----------	--------------

2823

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/600,203

Applicant(s)

KLOSTER ET AL.

Examiner

Khiem D. Nguyen

Art Unit

2823

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14, 16, 26, 27 and 29-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-14, 16 and 30-41 is/are allowed.
- 6) ☒ Claim(s) 1-8, 26 and 27 is/are rejected.
- 7) ☒ Claim(s) 9 and 29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Claim Rejections - 35 USC § 102***

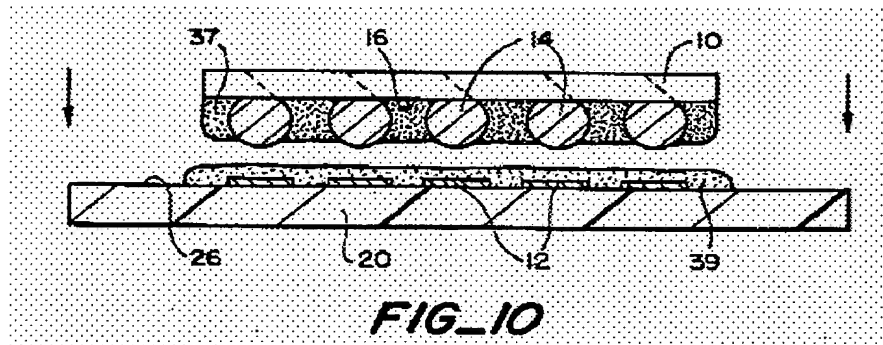
1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

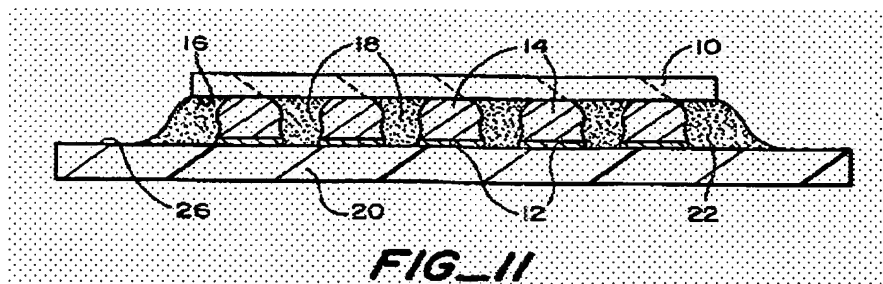
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-8 and 26-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Capote et al. (U.S. Patent 6,121,689).

In re claim 1, Capote discloses a method, comprising: forming a layer of first material 39 between two substrates 10, 20 of a stacked device (FIGS. 10); and



forming a layer of second material 37 between the two substrates 20, 10 of the stacked device, wherein the second material 37 causes a reaction in a portion of the first material 39 (col. 9, lines 5-39 and FIGS. 10 and 11).



In re claim 2, as applied to claim 1 above, Capote, discloses all claimed limitations including the limitation wherein the reaction comprises polymerization (col. 12, lines 10-33).

In re claim 3, as applied to claim 1 above, Capote, discloses all claimed limitations including the limitation wherein forming the layer of first material 39 comprises diffusing the first material 39 between a portion of the two substrate 10, 20 of the stacked device (col. 9, lines 19-39).

In re claim 4, as applied to claim 3 above, Capote, discloses all claimed limitations including the limitation wherein the first material 39 is selected from the group consisting of: diisocyanate monomers, a diisocyanate end-capped compliant oligomer, and p-toluenesulfonyl semicarbazide (col. 16, lines 52-66).

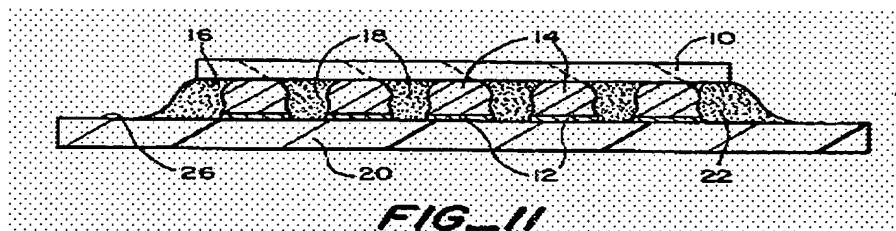
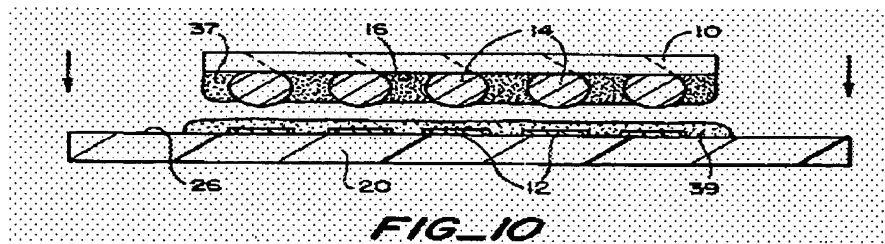
In re claim 5, as applied to claim 1 above, Capote, discloses all claimed limitations including the limitation wherein forming the layer of first material 39 comprises one or more of: injecting the first material 39 between a portion of the two substrates 10, 20 of the stacked device, spraying the first material 39 between the portion of the two substrates 10, 20 of the stacked device, and immersing the two substrates 10, 20 of the stacked device in the first material 39 (col. 8, lines 52-66).

In re claim 6, as applied to claim 1 above, Capote, discloses all claimed limitations including the limitation wherein forming the layer of second material 37 comprises diffusing the second material 37 between a portion of the two substrates 10, 20 of the stacked device (col. 9, lines 5-39 and FIG. 10).

In re claim 7, as applied to claim 3 above, Capote, discloses all claimed limitations including the limitation wherein the second material 37 is selected from the group consisting of: water, a hydroxyl end-capped oligomer, and a carboxylic acid end-capped polymer (col. 15, lines 4-15).

In re claim 8, as applied to claim 1 above, Capote, discloses all claimed limitations including the limitation wherein forming the layer of second material 37 comprises one or more of: injecting the second material 37 between a portion of the two substrates 10, 20 of the stacked device, spraying the second material 37 between the portion of the two substrates 10, 20 of the stacked device, or immersing the two substrates 10, 20 of the stacked device in the second material 37 (col. 8, lines 52-66).

In re claim 26, Capote discloses a method, comprising: forming a layer 39 of material between two substrates 10, 20 of a stacked device; and exposing the layer to one of a temperature differential or a pressure differential (col. 10, lines 20-24), wherein a chemical reaction (polymerization) inherently results in the portion of the layer of material increasing in volume (col. 9, lines 5-39 and FIGS. 10 and 11).



In re claim 27, as applied to claim 26 above, Capote, discloses all claimed limitations including the limitation wherein the reaction comprises polymerization (col. 12, lines 10-33).

Allowable Subject Matter

3. Claims 10-14, 16 and 30-41 are allowed over prior of record.
4. Claims 9 and 29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Applicants' Amendment and Arguments

5. Applicants' arguments filed November 13th, 2006 have been fully considered but they are not persuasive.

Applicants contend that the reference Capote et al. (U.S. Patent 6,121,689), herein known as Capote does not teach or suggest the limitation of "wherein the second material causes a chemical reaction in a portion of the first material".

In response to Applicants' contention that Capote does not teach or suggest wherein the second material causes a chemical reaction in a portion of the first material, Examiner respectfully disagrees.

Applicants' attention is directed to (col. 12, lines 3-15), where Capote teaches wherein the reaction comprises crosslinking (col. 12, line 11) and polymerization (col. 12, lines 14). Thus, Capote does suggest there is a chemical reaction between the second material and the first material.

Furthermore, as cited in claim 7, Applicants' claimed that the second material is selected from the group consisting of water. Capote discloses in (col. 15, line 60 to col. 16, line 5), that when crosslinked, water can acts as a plasticizer which softens the cured adhesive composition. Therefore, Capote does suggest that the second material can be water which causes a chemical reaction in a portion of the first material during cross-linking.

For this reason, Examiner holds the rejection proper.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Correspondence

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khiem D. Nguyen whose telephone number is (571) 272-1865. The examiner can normally be reached on Monday-Friday (8:30 AM - 5:30 PM).

Art Unit: 2823

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew S. Smith can be reached on (571) 272-1907. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

K.N.
January 16, 2007

Brook Kebede
BROOK KEBEDE
PRIMARY EXAMINER